

Claims

[c1] We claim as our invention:

1. A golf club head comprising:

a face component composed of a metal material, the face component having a mass ranging from 50 grams to 110 grams; and

an aft-body connected to the face component, the aft-body having a mass ranging from 10 grams to 60 grams; wherein the golf club head has a mass ranging from 165 grams to 225 grams and a volume ranging from 290 cubic centimeters to 600 cubic centimeters.

[c2] 2. The golf club head according to claim 1 further comprising a weight member having a mass ranging from 30 grams to 120 grams.

[c3] 3. The golf club head according to claim 1 wherein the face component has a mass ranging from 65 grams to 95 grams.

[c4] 4. The golf club head according to claim 1 wherein the aft-body is composed of a plurality of plies of pre-preg material.

- [c5] 5. The golf club head according to claim 1 wherein the aft-body has a mass ranging from 15 grams to 50 grams.
- [c6] 6. The golf club head according to claim 2 wherein the weight member has a mass ranging from 50 grams to 80 grams.
- [c7] 7. The golf club head according to claim 1 wherein the golf club head has a volume ranging from 350 cubic centimeters to 510 cubic centimeters.
- [c8] 8. The golf club head according to 1 wherein the face component comprises a striking plate portion and a re-turn portion.
- [c9] 9. The golf club head according to claim 1 wherein the face component is composed of a metal material selected from the group consisting of titanium alloy, amorphous metal, stainless steel and maraging steel.
- [c10] 10. A golf club head comprising:
 - a face component composed of a metal material, the face component having a mass ranging from 50 grams to 110 grams;
 - an aft-body connected to the face component, the aft-body having a mass ranging from 10 grams to 60 grams;
 - at least one weight member attached to the aft-body,

the at least one weight member having a mass ranging from 30 grams to 120 grams,
wherein the golf club head has a mass ranging from 165 grams to 225 grams and a volume ranging from 290 cubic centimeters to 600 cubic centimeters.

[c11] 11. The golf club head according to claim 10 wherein the face component has a mass ranging from 65 grams to 95 grams.

[c12] 12. The golf club head according to claim 10 wherein the aft-body is composed of a plurality of plies of pre-preg material.

[c13] 13. The golf club head according to claim 10 wherein the aft-body has a mass ranging from 15 grams to 50 grams.

[c14] 14. The golf club head according to claim 10 wherein the at least one weight member has a mass ranging from 50 grams to 80 grams.

[c15] 15. The golf club head according to claim 10 wherein the golf club head has a volume ranging from 350 cubic centimeters to 510 cubic centimeters.

[c16] 16. The golf club head according to claim 10 wherein the moment of inertia about the Izz axis of the golf club

head is greater than 3000 grams–centimeter squared.

- [c17] 17. The golf club head according to claim 10 wherein the face component is composed of a metal material selected from the group consisting of titanium alloy, amorphous metal, stainless steel and maraging steel.
- [c18] 18. The golf club head according to 10 wherein the face component comprises a striking plate portion and a return portion.
- [c19] 19. The golf club head according to claim 10 wherein the aft–body comprises a crown portion and a sole portion.
- [c20] 20. The golf club head according to claim 19 wherein the sole portion of the aft–body comprises a bottom section and a ribbon section.
- [c21] 21. The golf club head according to claim 18 wherein the return portion comprises an upper lateral section and a lower lateral section.
- [c22] 22. The golf club head according to claim 18 wherein the return portion comprises a heel lateral section and a toe lateral section.
- [c23] 23. The golf club head according to claim 18 wherein the return portion comprises an upper lateral section.

- [c24] 24. The golf club head according to claim 18 wherein the return portion comprises a lower lateral section.
- [c25] 25. A golf club head comprising:
a face component composed of a metal material, the face component having a mass ranging from 50 grams to 110 grams; and
an aft-body connected to the face component, the aft-body comprising a crown portion and a sole portion;
wherein the golf club head has a mass ranging from 165 grams to 225 grams and a volume ranging from 290 cubic centimeters to 600 cubic centimeters.
- [c26] 26. The golf club head according to claim 25 wherein the face component has a mass ranging from 65 grams to 95 grams.
- [c27] 27. The golf club head according to claim 25 wherein the aft-body is composed of a plurality of plies of pre-preg material.
- [c28] 28. The golf club head according to claim 25 wherein the golf club head has a volume ranging from 350 cubic centimeters to 510 cubic centimeters.
- [c29] 29. The golf club head according to claim 25 wherein the moment of inertia about the Izz axis of the golf club head is greater than 3000 grams-centimeter squared.

- [c30] 30. The golf club head according to claim 25 wherein the face component is composed of a metal material selected from the group consisting of titanium alloy, amorphous metal, stainless steel and maraging steel.
- [c31] 31. The golf club head according to 25 wherein the face component comprises a striking plate portion and a return portion.
- [c32] 32. The golf club head according to claim 25 wherein the aft-body is composed of a non-metal material.
- [c33] 33. The golf club head according to claim 25 wherein the sole portion of the aft-body comprises a bottom section and a ribbon section.
- [c34] 34. The golf club head according to claim 31 wherein the return portion comprises an upper lateral section and a lower lateral section.
- [c35] 35. The golf club head according to claim 31 wherein the return portion comprises a heel lateral section and a toe lateral section.
- [c36] 36. The golf club head according to claim 31 wherein the return portion comprises an upper lateral section.
- [c37] 37. The golf club head according to claim 31 wherein the

return portion comprises a lower lateral section.

- [c38] 38. A golf club head comprising:
a face component composed of a titanium alloy material,
the face component having a mass ranging from 50
grams to 110 grams; and
an aft-body connected to the face component, the aft-
body composed of a composite material, the aft-body
comprising a crown portion and a sole portion;
wherein the golf club head has a mass ranging from 165
grams to 225 grams and a volume ranging from 290 cu-
bic centimeters to 600 cubic centimeters.
- [c39] 39. The golf club head according to 38 wherein the face
component comprises a striking plate portion and a re-
turn portion.
- [c40] 40. The golf club head according to claim 38 wherein the
sole portion of the aft-body comprises a bottom section
and a ribbon section.
- [c41] 41. The golf club head according to claim 39 wherein the
return portion comprises an upper lateral section and a
lower lateral section.
- [c42] 42. The golf club head according to claim 39 wherein the
return portion comprises a heel lateral section and a toe
lateral section.

- [c43] 43. The golf club head according to claim 39 wherein the return portion comprises an upper lateral section.
- [c44] 44. The golf club head according to claim 39 wherein the return portion comprises a lower lateral section.
- [c45] 45. The golf club head according to claim 38 wherein the golf club head has a coefficient of restitution ranging from 0.81 to 0.94.